

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CRAIG DAVID WEISSMAN,  
GREGORY VINCENT WALSH,  
and ELIOT LEONARD WEGBREIT

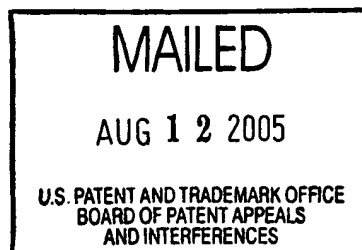
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Appeal No. 2004-1970  
Application No. 09/073,748

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ON BRIEF

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Before HAIRSTON, DIXON, and LEVY, Administrative Patent Judges.  
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 133-165, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relate to method and apparatus for creating a well-formed database system using a computer.

Claim 133 is representative of the invention, and is reproduced as follows:

133. A method of generating one or more database systems, the method comprising:

providing a metadata system that includes a metadata schema, a facility for entering instructions into the metadata schema, and a facility for manipulating the metadata schema;

receiving instructions from a user, wherein the instructions are entered into the metadata schema and are used to create a business database system; and

automatically generating the business database system according to the instructions contained in the metadata schema such that the business database system is well-formed.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Anand et al. (Anand)	5,721,903	Feb. 24, 1998
Papierniak et al. (Papierniak)	6,128,624	Oct. 3, 2000 (filed Nov. 12, 1997)

Claims 133-165 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anand in view of Papierniak.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted

rejection, we make reference to the answer (mailed October 16, 2003) for the examiner's complete reasoning in support of the rejection, and to the brief (filed July 28, 2003) and reply brief (filed December 16, 2003) for the appellants' arguments thereagainst.

Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii) (eff. Sept. 13, 2004).

#### OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer. Upon consideration of the record before us, we make the determinations which follow.

At the outset, we note appellants' assertion (brief, page 9) that the claims should be considered in two groups. Appellants

list claim 133 as representative of the first group, and list claim 140 as representative of the second group. Appellants' arguments are consistent with these groupings. Accordingly, we select claim 133 as representative of the the Group including claims 133, 134, 136-139, 141, 142, 144-147, 149, 150 152-155, and 157-165. We additionally select claim 140 as representative of the Group including claims 135, 140, 143, 148, 151 and 156. We begin with claim 133.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434,

1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (answer, page 3) is that Anand teaches all of the claim limitations of Appellants' claim 133 except a business database system. To overcome this deficiency of Anand, the examiner turns to Papierniak for a teaching of a business database system. The examiner maintains (answer pages 3 and 4) that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to have a

business database and to combine Anand's metadata system with Papierniak's business database system and to modify in [sic] Anand in view of his teachings of a data warehouse because such a modification would allow Anand to store large amounts of transaction-level data for later analysis and to have the ability to seek a competitive edge in business."

Appellants' position (brief, page 10 and 11) is that Anand "is directed to 'provid[ing] a system and method for generating reports from a computer database which allows a user to retrieve and analyze data with one tool.' (Col. 1, lines 54-56). In other words, Anand describes a filter for an existing database that extracts pieces of that existing database and presents them to the user in a report." "Anand [] discloses various ways of linking and displaying data .... section certainly does not disclose 'automatically generating the business database system according to the instructions contained in the metadata schema,' and has nothing to do with a database being 'well-formed'. Thus, Anand neither discloses nor suggests these elements of claim 133," (brief, page 11). Since Anand is directed toward creating a data filter for an existing database, rather than automatically creating a well-formed database, it "teaches away

from the present invention." As for Papierniak, Appellants state "that Anand and Papierniak, either alone or in combination, neither disclose nor suggest 'automatically generating the business database system according to the instructions contained in the metadata schema such that the business database system is well-formed,' as recited in claim 133," (brief, page 10).

From our review of Anand, we find, for the reasons which follow, that Anand teaches a system and method for generating a report from a computer database for a user, (col. 1, lines 4-7). The system contains three main subsystems, (col. 2, lines 1-16). First, this system uses and user requests for data to generate dimensional queries for retrieving data from a database and processing user modifications to data types used in generating the report. Second, the system reads data from the database, creates the data types, creates a mapping of the data types to the data, develops Structured Query Language (SQL), and returns query results to the first subsystem. Lastly the system creates the report at a predetermined time.

From Anand's disclosure, we find that although Anand discloses using a database to generate reports of value to the user and uses similar nomenclature as appellants, that as asserted by appellants (brief, page 12), Anand does not teach

generating a database, but rather teaches generating reports from an existing database.

Turning to Papierniak, we find that the reference is related to supporting the collection, storage and analysis of Internet and/or electronic commerce data, (col. 13, lines 7-51). The invention is described as a data storage and retrieval solution whose primary purpose is to allow decision-makers to exploit intelligence contained in datasets derived from several sources, (col. 4, lines 28-35). Papierniak discloses a system comprising three steps, (col. 13, lines 7-51). The first step the system performs is finding and collecting data based on the user's dynamic business needs. This data is located and synthesized from multiple sources into useful information. Second, the system structures and stores the data in such a way that useful long term and policy-related knowledge can be easily used and derived. This is achieved by parsing, categorizing, cleansing, correlating, indexing, and formatting of the collected data. The third and final step is the analysis and discovery of the data. This process recognizes the patterns, trends, and exceptions of the data so that information can be presented to the users in such a way so as to aid them in their decision-making process.



More specifically Papierniak discloses a system architecture comprising six key components. These components are the Front-end, WebWarehouse Designer, WebMap, WebWarehouse, Websmart and Metadata Management Utility, (col. 18, lines 39 and 40). The WebMining, Front-end utilizes customer engagement to define customer problems and needs. This user interaction is facilitated through the Data Discoverer which then assures the rest of the system acts in accordance with the user defined needs and goals. The goal of the Data Discoverer is to automate, as much as possible, the process of collecting operational and business data, and then storing the collected data in a well defined structure according to the user needs. (col. 19, lines 55-67). It automatically finds the necessary information and identifies what types of infrastructure the system requires, (col. 18, lines 49-65; col. 20, lines 45-47). This completed structure is also known as metadata, (col. 20, lines 38-47). Based on the work done by the Front-end, and particularly the Data Discoverer, the WebWarehouse Designer provides the overall structure, the core design, of the WebWarehouse, (col. 18, lines 66-77; Col. 19, lines 1-12). The Webtrack system then collects and extracts information from the sources, (col. 14, line 18-22).

This information is then loaded into the WebWarehouse, by the Data Transfer Tool, which is its physical repository, (col. 19, lines 13-21 and col. 19, lines 17-23). WebSmart allows the user to query and analyze the data, (col. 19, lines 24-33). Finally, the Metadata management utilities properly manages, coordinates, and reconciles the different sets of metadata, (col. 19, lines 34-37).

From the disclosure of Papierniak, we find all the limitations of claim 133. Through collecting business data and storing it in a well-defined structure, we find that Papierniak discloses a well-formed business database system, (col. 20, lines 38-44). The Data Discoverer provides metadata about the information contained in the outside systems and relays them to the WebWarehouse Designer which then develops the overall structure of the WebWarehouse. This Metadata system includes a metadata schema as is consistent with Appellants' description of his own invention wherein metadata is used to define a schema for a database, (specification, page 12). This is consistent with Appellants' definition of metadata as being "data that defines other data" and schema as being "a description of the organization of data in a database", (Spec., page 11). As

described, supra the Front end component of the system in Papierniak uses customer engagement in formulating the system. The Data Discoverer utilizes the user defined parameters as a starting point in the execution of the system and the results of the Data Discovery process are highly interactive and highly dependent upon customer needs, (col. 21, lines 31-38).

From this we find that Papierniak discloses a system containing "a facility for entering instructions into the metadata schema", "a facility for manipulating the metadata schema", "receiving instructions from a user, wherein the instructions are entered into the metadata schema and are used to create a business database system", (brief, claim 133). In addition, Papierniak's specifically states that all of the operations and apparatus referred to in the invention are that of a computer, (col.7, line 55 through col. 8, line 10). Indeed, Papierniak discloses that operations performed by humans are not desirable, (col. 7, lines 58-61). We therefore find that Papierniak discloses automatically generating a business database system. Thus, we find that Papierniak contains all of the limitations recited in Appellants' claim 133.

We are not persuaded by appellants' assertion (brief, pages 17-19) that Papierniak does not teach "automatically generating the business database system according to the instructions contained in the metadata schema such that the business database system is well-formed" and thus does not meet the limitations of claim 133. We note that Appellants' brief refers to several passages contained in Papierniak but contains no analysis of the disclosure of Papierniak to support these general assertions. We are not provided with any reasons as to why appellants believe that Papierniak does not meet claim 133. Merely providing a passage from the reference and a general statement that the claim language is not met, without reasons to support the assertion is insufficient to convince us of any error on the part of the examiner. While the invention contained within Papierniak is described differently, we find, for the reasons, supra, that Papierniak contains all of the limitations set forth in Appellants' claim 133.

From all of the above, we affirm the rejection of claim 133, and claims 134, 136-139, 141, 142, 144-147, 149, 150, 152-155, and 157-165, which fall with claim 133 (brief, page 9) over the teachings of Papierniak, and consider Anand to be cumulative to the teachings of Papierniak. The Board may rely on one reference

alone in an obviousness rational without designating it as a new ground of rejection. In re Bush, 296 F.2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961); In re Boyer, 363 F.2d 455, 458 n.2, 150 USPQ 441, 444 n.2 (CCPA 1966). Lack of novelty is the ultimate of obviousness. See In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982).

We turn next to the rejection of claim 140. We reverse the rejection of claim 140 because neither Anand nor Papierniak teach or suggest a method where instructions for a metadata schema contain semantic definitions and where a business database system is automatically generated using those semantic definitions such that the business database system is well-formed as required by claim 140.

We are not persuaded by the examiner's assertion (answer, page 5) that Annad teaches this feature. From our review of Anand, we find that although Anand teaches the use of metadata to provide the primary vocabulary of a reporting system (Col. 10, lines 30-37) Anand does not teach the use of semantic definitions in the generation of business database systems. As the other claims in the group also require the use of semantic definition, which is not taught by Anand or Papierniak, the rejection of

claims 135, 143, 148, 151, and 156 under 35 U.S.C. § 103(a) is reversed.

OBSERVATIONS AND REMARKS

We bring to the attention of appellants and the examiner, the following reference: U.S. Patent No. 6,363,392, which describes a method and system for providing a flexible, web-sharable database with proximity searching capability, (col. 3, lines 36 and 37). A system receives data from a remote source and a database manager automatically assembles the data into a database that conforms to the schema of the data received, (col. 3, lines 38-49). The database manager creates metadata which may contain customization requests by the user, (col. 4, lines 11-24). It would appear that this reference, directed to generating a database, meets the limitations of at least claim 163. However, we decline to enter a New Ground of Rejection under 37 CFR §41.50(b) in view of our affirmance, supra, of the rejection of claim 163. Should this application be subject to further prosecution subsequent to this appeal, the examiner should consider whether to apply this reference to claim 163 and/or any other claims. In addition, with respect to our findings with regard to Papierniak, we leave it to the examiner


to determine whether any other prior art exists with respect to semantic types that could be used in combination with Papierniak, to meet claims 135, 140, 143, 148, 151, and 156.

CONCLUSION

To summarize, the decision of the examiner to reject claims 133, 134, 136-139, 141, 142, 144-147, 149, 150, 152-155 and 157-165 under 35 U.S.C. § 103 is affirmed. The decision of the examiner to reject claims 135, 140, 143, 148, 151, and 156 under 35 U.S.C. § 103(a) is reversed.

AFFIRMED-IN-PART

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
STUART S. LEVY  
Administrative Patent Judge



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